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Contents

Introduction

The meeting New Models for Health Care 2, held on November 18, 2005, was designed to build on suggestions from the first New Models meeting, held at MIT on April 12, 2005, which, broadly stated, included exploring various approaches to improving health care delivery; developing Working Groups to tackle specific issues with defined deliverables such as plans, proposals or concept papers; and developing a Roadmap that would help guide and document the group's efforts. See Appendix A for Participant List and Final Agenda.

Meeting Outcome

At the meeting, many actionable suggestions were made; significant follow-up efforts have since been initiated. While there was general agreement at the meeting on the need for high-quality, accessible, patient-centered health care, there was some disagreement or uncertainty about how to achieve this goal.

Participants suggested many topics for potential projects, or areas for exploration, as well as suggestions for how the group should move forward. Three primary suggestions were 1) Develop a vision for the US health care system and develop a roadmap for getting there 2) Explore disease management for conditions that span the lifespan or impact productivity, and 3) Explore information systems/data mining for research, clinical, and quality/outcome purposes. The primary suggestions for the group were to develop the group's vision, core principles, short- and long-term goals; identify what is and is not working in the US system; identify focused opportunities likely to yield significant results soon.

Lessons Learned and Resulting Activities

Overall, this meeting reinforced the need for a neutral, multidisciplinary group comprised of experts from government, industry, and academia to address the future of health care in the United States. It also clarified the need for a framework within which such a group can effectively work together to meaningfully address actionable issues. We value the philosophical diversity of this group and understand that it won't achieve consensus about one general "model." We expect that developing and maintaining a roadmap that includes various pathways, and developing projects that explore various models, could help ensure that the group maintains its unique perspective and its valuable neutrality.

Scope Change

In the absence of a current framework for productive large meetings, it was determined that, going forward, rather than focusing on organizing more large (30+) meetings, in the near future the core group should focus on developing 1) a draft roadmap and 2) concepts and white papers for potential projects. This required organizing small meetings of informal working groups, documenting the groups' activities, and producing associated deliverables.

Over the last several months, Working Groups have begun to respond to items 1 and 2 above. A draft Roadmap outline as well as a vision and mission for the group have been

developed, and participants from academia and industry have formed two groups around the issues of back pain and obesity/diabetes (conditions that can span the lifespan or impact productivity) with the goal of developing funded projects that explore disease management that reduces costs and improves quality of care.

November 18, 2005 Meeting Synopsis

A short summary of the November 18 New Models meeting follows. The General Proceedings of the meeting are provided in Appendix B.

Opening the day, Louis W. Sullivan, MD reviewed the state of the U.S. health care system, and charged the group with developing a rational approach to improving the system, i.e., keeping what works and fixing what doesn't. (Later in the day, Newt Gingrich called in for a brief discussion with Dr. Sullivan on different approaches to fixing the system.) Tenley Albright, MD then tasked the group to define projects that will tackle specific problems, starting with themes that were raised in the April 12 meeting.

While a few were asked in advance to speak, all participants engaged in the four modules, in keeping with our philosophy "everyone is on the panel." Modules were designed to help us to share diverse perspectives, identify critical issues, discover commonalities, and develop action plans and projects.

- Module One: Review of Major Themes from the Last Meeting: Creating Value Through Information, Results, Primary Care and Prevention (Michael Porter and Toby Cosgrove)
- Module Two: Projects for Primary Care and Prevention
- Module Three: Projects for Measuring Results of Health Care Providers
- Module Four: Proposals: What's Next?

Major Issues Discussed

The discussion can be broadly categorized as follows: Transparency of Information, Outcome Measurement, Quality of Care, Access to Care, Prevention, and Shared Decision Making.

There was general agreement on the need for high-quality, accessible, patient-centered health care; there was some disagreement or uncertainty about how to achieve this goal, but widespread agreement on some needed end-states:

1. Increase transparency and access to information: patient records, provider performance, general medical, research results
2. Define "quality care," how to measure it and how to leverage it
3. Implement "shared decision making" between doctor and patient

In addition to the integration of existing and new technologies, these actions will require changing the behavior of citizens, patients, doctors, health care institutions, and insurance companies. How can we change/improve behavior?

- Doctors, health care systems:
  - Get commitment by physicians to measure outcomes. Incentivize through rewards and punishment. For example, UHC requires physicians and healthcare systems to share data (within UHC); if they won't, they don't get a qualification.
  - Performance data should include type and quality of interaction with patient in addition to procedure outcomes.
  - Give providers medical data and information, but also give them decision-support tools. Many don't use information that is available. Why not?
  - Address the silo organizations of most provider and academic systems, which work against integration
  - Change medical education. Train new doctors to be collaborative – with patients, other docs, etc.

- Patients:
  - Translate and demystify the health care process; provide information on results and enable choice; provide information about wellness, disease prevention, treatment, their medical records
  - In addition to providing information, provide decision-support tools. Many don't use general and personal health information that is available. Why not?
  - Proactive outreach by providers and insurance– follow up after visits, tests, procedures, etc.

Suggested Topics from Participants for Further Exploration/Projects

Projects must explore actionable issues that resonate with a broad audience

1. Roadmap
2. Disease management for conditions that span the lifespan or impact productivity such as obesity, back pain, diabetes, asthma. Demonstration projects that investigate common problems that are costly, ineffectually treated, and affect the private sector – look at prevention all the way to tertiary care or hospice
3. Underserved populations: access to care and disease management
4. Information systems/data mining for research, clinical, and quality/outcome purposes. Mine data and get information to patients and providers
5. Health promotion, disease prevention in various settings: family; work; media (marketing, advertising, entertainment); community
6. Wellness Centers of the Future – can behavioral interventions in a susceptible population make a difference
7. Model Outpatient Clinics
8. Trans-disciplinary care
9. Smart Cards
10. Guide to consumers on choosing health insurance plans

11. Basic reform in medical education
12. Current-State Analysis to identify what is and is not happening in the US system
13. Increase IT content of medical processes [better integrate IT into medical care and administration]
14. Define a standard of information that (a) healthcare plan should have and provide to members, doctors, nurses and care managers, so that everyone is looking at the same information
15. Decision Making
    - Look at consumer input in terms of decision making, versus outcomes and data – develop a model
    - How do we get outcome information as close to provider level as possible, rather than hospital level – consumers make decisions at doctor level
    - How can "decision aids" become standard practice; how can we ensure the quality of decision aids
    - How do we give the responsibility of "choice" to the patient and ensure quality?

Suggestions for the New Models Group

1. Develop the group's vision, core principles, short- and long-term goals; Identify what is and is not happening [working?] in the US system; Identify focused opportunities likely to yield significant results soon
2. Develop a vision for the US health care system; develop a roadmap for getting there (see also Number 1 under Suggested Topics above)
3. Centralize around information
4. Discuss disagreements; acknowledge competing models
5. Get issues into bite-sized pieces
6. Take (a) major initiative and break it down into projects. Select actionable items with short timeframes, maybe 6 months.
7. Choose initiatives that can serve as metaphors for other conditions – address with broad perspective
8. Select actionable projects. (We should) not fall into the policy trap of trying to advise Congress and the Federal Government. Most action is taken at the state level.
9. Determine the voids, don't reinvent the wheel. When developing demo projects, be very careful not to duplicate efforts
10. Address issues in a non-biased way

Other Issues

1. Policy vs practice: impact policy at state level (where decisions are made); impact delivery at regional scale
2. Genetics and personalized medicine: discrimination, privacy, other issues

3. Data mining: privacy, usefulness
4. Aligning the goals of consumers and providers
5. Who gets what level of care: should we set a minimum standard
6. Definitions: quality, consumer-driven care vs patient-centered care, competition on results

Progress and Meetings Held since November 18

Activities since November 18 include:

1. Several meetings to follow up on suggestions made by meeting attendees, primarily Roadmap development, quality of care, performance measurement
2. Development of Draft Roadmap Outline
3. Ongoing meetings and discussions regarding potential pilot projects, with team building, concept development, and exploration of funding sources

General Follow-up to November 18 Meeting

- 1/24/06 – Meeting in Washington, DC: Dr. Louis Sullivan, Honorable Newt Gingrich (Leader and Speaker at Nov 18 event, respectively), three Gingrich staffers, Ken Kaplan, Tenley Albright
- 1/25/06 – Meeting in Washington, DC: Frank Raines (attended both New Models meetings), Ken Kaplan, Tenley Albright

Roadmap to Improved Health Care Delivery System

The Roadmap Working Group currently consists of Tenley Albright, Jeannie Bochette, Paula Johnson, Kenneth Kaplan, Campbell Murray, Daniel Schodeck, and John Ullo. As of September 30, 2006, a small core team has developed a draft Roadmap outline. As well, the Working Group has drafted a mission and vision of the group, and discussed how it might be organized to carry out the mission. A list of Working Group meetings and the Draft Roadmap Outline are provided in Appendix C.

Potential Pilot Projects

Obesity

The informal Working Group on Obesity that emerged from the November 18, 2005 New Models meeting has been actively exploring the development of an initiative on childhood obesity and its relationship to the incidence of adult diabetes in children. The focus is on children because there is less quantitative data for this population and children represent the greatest opportunity for improvement. Primary members of this working group are Dr. Paula Johnson of Brigham and Women's Hospital, Leslie Robinson of AmeriChoice, and Dr. Tenley Albright and Ken Kaplan of the Collaborative Initiatives at MIT. Other members include Dr. Christopher Hug of MIT's Whitehead Institute and Children's Hospital, Dr. Lourdes-Hernandez Cordero of Columbia University. Other contributors include Jim Tallon of the New York Hospital Fund, Tony Welters of AmeriChoice, and Dr. Louis Sullivan, Former Secretary of Health and Human Services.

See Appendix D for a comprehensive list of working group meetings. A concept paper is under development; see Appendix D for working group observations.

Low Back Pain

At the November 18 meeting, Dr. David Eisenberg, Director of the Harvard Medical School's Osher Institute, proposed exploring the issue of low back pain with insurance and industry partners. Ken Kaplan facilitated the discussions between Dr. Eisenberg and two major insurance companies, United Health Group and Zenith Insurance. Mr. Kaplan has also brought in Dr. Mark Friedberg, a physician and researcher engaged in studying quality of care, to several of these meetings. Early discussion with United Health involved brainstorming and data sharing with their extensive research group. Early discussions with Zenith Insurance indicated their interest in addressing quality of care and its influence on cost and finding the appropriate practitioners for back pain patients; discussions continued with Zenith throughout the reporting period, with Zenith interested in sponsoring research in integrative care and co-developing a project with Dr. Eisenberg. A concept paper has not been developed. A list of Back Pain meetings and an account of progress to date are provided in Appendix E.

Appendices

Appendix A: November 18 Participant List and Final Agenda

Appendix B: General Proceedings of November 18 New Models for Health Care Meeting
- Attachment 1: Transcript of Opening Address by Louis W. Sullivan, MD
- Attachment 2: Transcript of Review of Major Themes from Last Meeting by Michael Porter and Toby Cosgrove, MD

Appendix C: Roadmap Working Group Meetings and Draft Roadmap Outline

Appendix D: Obesity Working Group Meetings and Working Group Observations

Appendix E: Back Pain Working Group Meetings and Progress to Date

Appendix A: November 18 Participant List and Final Agenda

Participants
New Models for Health Care
November 18, 2005

Louis Sullivan, MD
Founder, President Emeritus
Morehouse School of Medicine
Former Secretary of Health & Human Services

Tenley E. Albright, MD
Meeting Organizer

Harris A. Berman, MD
Dean, Public Health, Tufts University
Former CEO, Tufts Health Plan

Dimitris Bertsimas, PhD
Professor, MIT Sloan School of Management

Blenda "Jeannie" Bochette
Business Strategy
Steelcase Corporation

H. Kent Bowen
Professor, Harvard Business School

Bruce E. Bradley, MBA
General Motors Corporation

Neil S. Calman, MD
President and CEO
Institute for Urban Family Health

S. Ward Casscells, III MD
Vice President for Biotechnology, Professor of Medicine
University of Texas Health Science Center at Houston
Director, Clinical Research
Texas Heart Institute

Conrad A. Clyburn
US Army Telemedicine and Advanced Research Center
Georgetown University Medical School

Delos "Toby" Cosgrove, MD
CEO, Cleveland Clinic

Peter Doelger
Fmr. President and Chair
DMC Energy, Inc., Paris

Thelma Duggin
Executive Vice President
External Affairs & Business Development
AmeriChoice

David Eisenberg, MD
Director, Oscher Institute
Director, Integrated Medicine
Harvard Medical School

Alfred Engelberg
Trustee, Engelberg Foundation

Terry J. Fadem
Director, Office of Corporate Alliances
University of Pennsylvania

John Gallin, MD
Director, NIH Clinical Center

Newt Gingrich, PhD
CEO, Gingrich Group
Founder, Center for Health Transformation
(via conference call)

Deirdre Hering
Meeting Organizer

Paula A. Johnson, MD, MPH
Executive Director, Connor's Center for Women's Health and Gender Biology
Chief, Division of Women's Health
Brigham and Women's Hospital

Ken Kaplan
Meeting Organizer

William A. Knaus
Evelyn Troup Hobson Professor and Chairman
Department of Public Health Sciences
University of Virginia School of Medicine

Robert Langer
Institute Professor, MIT
Professor of Chemistry and Biomedical Engineering

Donald Lindberg, MD
Director, National Library of Medicine
National Institute of Health

Michael Love
President and CEO, Steelcase Design Partnership

Christopher J. McKown
President
Health Dialog Services Corporation

Aaron Moskowitz
Executive Editor
Biomedical Research & Education Foundation

Campbell Murray
Director, Novartis Bioventure Fund

Michael Porter
University Professor, Harvard University
Dir., Institute for Strategy and Competitiveness, HBS

Franklin D. Raines
Vice Chairman of the Board
Revolution Health Group, LLC

Jeannine M. Rivet
President and CEO, Optum
Executive VP, UnitedHealthGroup
Former CEO, UnitedHealthcare

Stephen R. Seiler, JD
Managing Partner, Windgage Partners

Steven Spear
Professor, Harvard Business School

Elizabeth Teisberg
Professor, Darden Business School
University of Virginia

Jon Ullo
Director of Research
Schlumberger-Doll Research

Albert Waxman, PhD
Senior Managing Member
Psilos Group Managers LLC

Anthony Welters
CEO, AmeriChoice
a UnitedHealthGroup Company

John E. Wennberg, MD
Director, Center for the Evaluative Clinical Sciences, Dartmouth Medical School

Howard Zucker, MD
Deputy Assistant Secretary for Health
U.S. Dept of Health and Human Services

New Models for Healthcare 2

Friday, November 18, 2005
Four Cambridge Center
Cambridge, Massachusetts

Agenda

8:30	**Coffee**	
9:00	**Welcome**	**Prof. Robert Langer, MIT Institute Professor**

Laying the Foundation

9:05 – 9:30	**Opening Remarks**	**Louis W. Sullivan, MD** Dr. Sullivan will review the state of the U.S. health care system, and charge the group with developing a rational approach to improving the system, i.e., keeping what works and fixing what doesn't **Tenley Albright, MD** Dr. Albright will task the group with defining specific projects, starting with themes raised at the April 12 meeting
9:30 – 10:45	**Module One:**	**Review of Major Themes from the Last Meeting: Creating Value through Information, Results, Primary Care and Prevention**
10:45 – 11:00	***Break***	***Refreshments in the meeting room***

Shifting from Discussion to Action

11:00 – 11:20		**Renovation or Transformation?** Newt Gingrich and Louis Sullivan discuss different approaches to taking action

Developing Projects for Action

11:25 – 12:15	**Module Two:**	**Projects for Primary Care and Prevention**
12:15 – 12:45	***Lunch***	***Served in the meeting room***
12:45 – 1:45	**Module Three:**	**Projects for Measuring Results of Health Care Providers**
1:45 – 3:00	**Module Four:**	**Proposals: What next?** ▪ Identify projects of interest ▪ Determine working groups ▪ Assign action items / deliverables ▪ Discuss a February meeting
3:00	Meeting adjourned	

Appendix B: General Proceedings, New Models for Health Care

November 18, 2005

INTRODUCTION

Tenley Albright, MD welcomed all and introduced co-host Prof. Robert Langer, MIT Institute Professor.

Prof. Langer welcomed all to MIT, and said that this meeting is a wonderful follow-up to the April 12 New Models meeting. He noted the excitement at MIT about health-related research, such as the joint program with Harvard in Health Sciences, a program in bioengineering, and a new revitalization of the landscape around MIT/Kendall Square. He also mentioned his personal work in nanotechnology, tissue engineering, and other work at MIT. He concluded by saying that on April 12 we raised the question, "How do we take the tremendous amount of intellectual capital here and move forward?" Hopefully we will start to answer that today.

Dr. Albright explained that half of this meeting's participants were at the April 12 meeting, and half were not, and that the intention of the first module of the meeting is to remind the old and initiate the new about the April 12 discussions.

Dr. Albright introduced Louis W. Sullivan, MD, former Secretary of HHS, and President Emeritus of Morehouse School of Medicine.

Dr. Sullivan reviewed the state of the U.S. health care system, and charged the group with developing a rational approach to improving the system, i.e., keeping what works and fixing what doesn't. (See Attachment 1 for transcript of Dr. Sullivan's talk.)

Dr. Albright then tasked the group to define projects that will tackle specific problems, starting with themes that were raised in the April 12 meeting.

All participants engaged in four modules designed to facilitate sharing of diverse perspectives, identify critical issues, discover commonalities, and develop action plans and projects.

- Module One: Review of Major Themes from the Last Meeting: Creating Value Through Information, Results, Primary Care and Prevention
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- Module Three: Projects for Measuring Results of Health Care Providers
- Module Four: Proposals: What's Next?

MODULE I

Review of Major Themes from the Last Meeting: Information, Results, Primary Care and Prevention

- **Michael Porter,** University Professor, Harvard University; Director, Institute for Strategy and Competitiveness, Harvard Business School
- **Toby Cosgrove, MD,** CEO of Cleveland Clinic

Prof. Porter, who was the keynote speaker at the April 12 New Models meeting, presented an overview to distill the key messages for those who were at that meeting, and to help those who weren't there to catch up with the perspectives that were shared in April. Used example of Cleveland Clinic's story – publishes results, focuses on value-driven healthcare.

Prof. Porter's points are condensed here. See Attachment 2 for the transcript of his talk.

Hope for this session: that we'll have two to five concrete initiatives that would be metaphors for the larger change that needs to happen. Can we find a project to address the initiative to raise the value in the system?

Measuring results is the fundamental driver of change in the system.

How do we increase the value of the care delivered? The system hasn't been organized so that competition is on value. Currently it is based on cost-shifting competition (zero-sum); we must change it to compete on value.

1. Focus on value, not just cost.
2. Shift the model from controlling supply to competing on results. We've got to get patients to providers who have the best value
3. Get the competition away from medical partners/institutions to medical conditions. That's where competition is created. Competition needs to be on the whole cycle of care, rather than discrete intervention (i.e. a surgeon's role). The cycle of care always starts with prevention and ends with disease monitoring.
4. Luckily, this is an industry were we shouldn't have to pay more for good quality: we have it in the system. But we have to get the diagnosis right the first time, and get the patient to the right drug.
5. Value delivery is very strongly dependent on the provider's experience, expertise and patients.
6. Competition should be regional and national, not just local.
7. Needs to be a system that rewards innovation as well.

If we accept this perspective, there are a series of implications:

- We have to be sure that providers have the right goal – value.
- Providers have to organize around the right values, restructure how to:

- Co-locate specialties
- Take the lead in measuring results.
- Get rid of multiple bills, changing the billing and pricing.

- Also there are some interesting implications to change the geographical nature of the system.

In short, the main idea: We've got to shift the basic nature of competition to focus on:

- Conditions
- Cycle of care
- Results

This requires: Information and reorganization.

Dr. Cosgrove spoke about how the Cleveland Clinic has evolved over time.

Dr. Cosgrove's points are condensed here. See Attachment 2 for the transcript of his talk.

Cleveland Clinic:

- Organized in a different way other than the traditional Department of Surgery, Department of Medicine; now we are in "Organ Systems" and "Disease Systems."
- Placed these new organizations in one physical space to cross-fertilize among specialties and develop expertise and help research.
- Moved some specialties to local hospitals. We've changed the way we physically and intellectually provide care to our patients. We have one central hospital, several other hospitals in Cleveland, and several community hospitals. We've centralized acute diseases in that area.
- We have to measure more than cost to determine value. This only comes from understanding the problems, recording them, and analyzing the results.
- Now we give a single bill, which is more patient-friendly; we are able to know what (will be) paid, and have provisos for unexpected outcomes.
- The glue that holds this all together is the willingness to be transparent with our outcomes. This was done first with cardiologists within the hospital, then with others. We publish results.
- Increasingly dependent on our electronic medical record.

Three major themes of Module I:

1. Transparency of information
2. Ability to measure results
3. Focusing on the medical condition leads to greater quality of care.

Questions from Participants

Q: What are the challenges raised by most doctors… NY cardiologists who published esults, resulting in "cherry picking" allegations?

M. Porter: There is no doubt that in the value-based system there will be efforts to "gain the system." We would expect to see that happen. (To minimize that): a) Measure results in a sophisticated way and b) Change over time. Then it becomes harder to "gain the system." People will expose holes in the system, but we can't let that stop us from going ahead.

T. Cosgrove: Early on there was "cherry picking." Over time, the risk adjusts - becomes more sophisticated.

Q: Focusing on the medical condition, is that really the best? Focusing on the patient, not the condition? (e.g., diabetic patient)

T. Cosgrove: (We) do focus on the patient now… they go to three places instead of six with (all the) multisystematic problems.

M. Porter: In a good diabetic practice, you will be able to know and anticipate issues. One medical condition becomes the major issue, i.e., "the quarterback."

Q: It sounds like you're both proposing creative destruction in healthcare; a number of hospitals will have to close.

M. Porter: Quite a few hospitals are spread too thin, have to decide where to cut back on services. (They will) operate less as stand-alone entities, will partner with other institutions. Part of the care cycle will involve other, more expert system, reallocating of services across institutions because healthcare is growing in the U.S. The organizational model needs to change. Some hospitals will shrink and go out of business but most of them will just reorganize.

T. Cosgrove: It needs to happen, politically it's not good… but it has to happen.

Comment: The healthcare system has to change, but what happens when the focus for competition is on the consumer? When the provided information is absorbed by consumers over the Internet, through the community? Need to arm consumers to participate in this search. They need help. They need someone to convert all of this information into a rating system.

Convenient care is needed in places like Wal-Mart, where 40 conditions (can be dealt with) by nurse practitioners.

Health care coverage – more dollars in the care of consumers; they pay, they choose. (We need) new ways to think about chronic care, not paying for "a la

carte." (We need) insurance pushed back into the catastrophic, not just day-to-day care.

Comment: Morals of reform (are) required; laws around coverage and minimum treatment laws in state.

Comment: Agreement with focusing on a disease model. (A) barrier I have run into as I drive co-location, need integration to drive outcome. The departmental structure works against integration. (It) works against how people have achieved their power, particularly in an academic environment.

T. Cosgrove: Money flows from the institution, not from the department. Leaders – new heads of these "disciplines." New educational models are needed.

Comment: Cleveland Clinic is terrific in improving competency of providers. Problems have been in business for too long. Dealing with enormously non-linear (don't understand all the inputs and how to code them) and free-enterprise system (aging system, illness system, diet and exercise-driven system). A problem I don't hear – information. The system has no information. From hospital to sub-intensive care system. (Need to) give a patient access to information and allow them to move it around.

Comment: President Bush's initiative … electronic medical record.

Comment: Every health plan should comply with transparency and certain information standards in a free-enterprise

M. Porter**:** Information architecture needs to change, but it's not everything. Information is generated by providers. First layer of information collection is at the provider – it is a problem, we haven't been able to do that. Cleveland Clinic sliced and diced (the information) so the patient can see it (except for a sensitive diagnosis like cancer, until the patient is told). Provider first collects information and make it available to everyone who needs it; second, how do you aggregate it to make it available across providers? That's a hard problem. IT standards, systems is an issue.

Comment: The only person who benefits currently from prevention is the consumer. Believe that prevention programs need to be paid for by them. Prevention and ordinary primary care put money in the consumers' hands.

Comment: Patients really need to own the system [their information], e.g., Hurricane Katrina, where most medical records were lost.

Question: Relating issues of care to areas of emphasis will this affect the poor getting these services?

Question: On hospital system is this a fair analogy – System of airlines… hubs, airports, down to small turboprop airports?

T. Cosgrove: Yes, that's an excellent way of looking at it. Tertiary hospitals, etc.

M. Porter: Got to get away from the model where have full-service institutions next door [to each other]. Some ways of aggregating value and experience that involve patient traveling to an institution, also, in other cases, one institution supervises another. Need new geographic partnership structures.

TRANSFORMING U.S. HEALTHCARE:

Newt Gingrich called in to lead a conversation about Transforming Health Care.

- **Newt Gingrich**
- **Donald Lindberg, MD, Director, National Library of Medicine**
- **Louis W. Sullivan**

N. Gingrich: Planning models assume that we'll have four times the rate of scientific knowledge than we have had in these last years. It's actually more like seven times.

- More scientists alive today than ever before
- All of them are connected, via Internet, phone, etc.
- We're not going to get to the "best solution" in the next few years, but we need to get incremental steps going. 24-7 continuing medical information online and available.
- We have inherited a 19th-20th century government that is essentially obsolete. In Galveston TX in the 1900's the agrarian model failed, so they developed the city manager model. Healthcare, based on the 1935 scribe on a typewriter with carbon paper, is obsolete today.
    - Just look at UPS, FedEX, EBay, Amazon, cellphones with cameras, ATMs worldwide, Travelocity and Expedia. Take that level of speed, efficiency, accuracy and compare that with the levels of governance today.
- Migrate a bit each day. Keeping as much of the past as you can, inventing what you think the future will be like. Migrate every day.
    - Korean cell phone that tests blood sugar and uploads to computer for diabetes; Sensei, suite of cell phones for disease states. The capacity to know, in real time, what we need to know. That is a system…
- Four books I recommend highly:
    - Peter Drucker, *The* Effective *Executive*

- Giuliani's book on leadership (how to move big systems)
- Bill Bratton, *Turnaround*
- Michael Willis, *Databall* (People will resist data if they don't like it)

T. Albright: Newt, how could a group like this help this happen?

N. Gingrich: Define what an intelligent 21st century healthcare system should look like.

- Say to baby boomers, as you age, this is the system you should expect because it matches up with the modern world.
- At the middle level, medical providers (such as) the American Hospital Association – how do they manage contracts, compensation and data?
- Need to incentivize the 20% of the population that provides 80% of the cost to do excellent preventative care.
- If you really want change, go to the corporations. 10.5 billion spent per year on healthcare.

To recap: Develop a coherent explanation of our theory and concrete examples of how we're going to get there

1. What as a nation we should do
2. Train people what to expect
3. Need a model for providers and people who pay in order to incentivize this.

MODULE II

Projects for Primary Care and Prevention

Facilitator: Let's move onto the implementation part of the meeting where we can begin to talk about potential projects that could explore some of our ideas.

Ken Kaplan explains how, as a designer he thinks about projects. Can either renovate – look at existing scheme – or start over, get a whole new site… starting from the widest perspective.

Looking at problems from a design perspective enables the assimilation of many different ideas. A lot heard this morning about what architects would call conceptual design. (This is) the most important part. (We need to) integrate healthcare policy and details. There's a lot on the macro level now. (We) must integrate with the details.

Dimitris Bertsimas, Boeing Professor of Operations Research, Sloan School of Management, then discussed his work with D2 Hawkeye using applied mathematics to develop information and data-based decisions.

Looked at claims data for five million people over five years, using sophisticated data mining methods – by nature non-linear – to try to: Assess quality, develop measures; and predict 20% of patients who will carry 80% of costs next year and try to intervene. The 20% are the people that we need to act on.

A key aspect is to define what "quality" is. Either generically, with "a decrease in hospitalization" as a measure, or "a decrease in cost" as a measure; or specifically for specific diseases.

Neil Calman, MD, President and Chief Executive Officer, The Institute for Urban Family Health, responded to earlier discussion.

Re: renovation versus building from scratch… maybe we really do need to tear it down.

Expressed a belief in technology and its ability to improve care to "raise all boats." De-localizing care to extremes of specialized care is missing the boat with the most people. Concerned that as we start to talk about quality we won't worry about access anymore. We are we improving quality for the people who have access already (not those who don't).

Gave example of IT use in his clinics, which use the Epic system like the Cleveland Clinic. An after-checkup report is handed to all patients. They keep at home. Have a copy of progress report. This is a way of really empowering people. 60% of visits, patients asked to look at monitors to see graphs & charts.

Howard Zucker, Assistant Secretary, Health and Human Services, addressed the quality issue and potential areas for projects.

Health promotion, disease prevention projects are possible in three communities:

1. Family – at the dinner table, at home, health needs to be pushed forward. If the has family changed… how do we shift to fit in? Internet – kids involved in computer industry in general.
2. Corporate/private sector – Marketing, food industry, cereal boxes, advertising. How to "sell" good health. Sports… image has been compromised by all the negative issues, would be glad to bring back positive images.
3. Public health: Gov't/Community – with Katrina, we have a golden opportunity for a community to be rebuilt, buildings rebuilt to promote health. Community health clinics, hub/spoke system. Opportunity to take at least one of the parishes and build from the ground up.

Comment: Diabetes was raised as a great disease model, following a patient all the way through the system.

K. Kaplan: could approach diabetes in a similar way as a new project will study the whole process of a stroke victim. From at home; with ambulance drivers mandated to

take you to the local hospital; to identifying the stroke, going to the right place; to the stumbling blocks in the E.R., transfers, treatment, rehab. Then there's the use of robotics and stem cells. Looking at the whole problem as a cycle and developing a project from concept to delivery.

Group discussion about: centralization of health care delivery and Porter/Teisberg proposal for competition on results and how the group should move forward. E. Teisberg clarified that it doesn't mean everyone travels for care. Physicians compete to be above the national standard on care. Being way below average is not okay.

It was noted that there are some fundamental disagreements that the group needs to address. The market competition model is an alternative to the central budgeting model. They are in competition. There is an alternative way. Consumers being given money to choose… unless we explicitly acknowledge there are competing models we will end up with people talking past each other.

Also noted that in industry, when a new product is developed, you ask "who's the user?" Newt's statement of the expectations of the user community (we need to) get right. (We) don't have expectations from consumers – "what's the use case?" We need to talk about this outside of any model, testing against different models, how does the user use it?

K. Kaplan: "Concept" needs to be dealt with first and revisited at every level.

The topic of decision-making around cost was raised. [A. Welters] Most decision making is around cost. It is the hidden cost that bankrupts the healthcare system. 90% / 10% rule, not 80% / 20%. The 10% isn't even in the cost structure today. With whatever model we embrace we have an outlier. Those kinds of individuals are managed in a completely different environment. Healthcare costs are driving most states close to bankruptcy. We need (to include) the 10%. This is only one thing that hasn't been factored in yet. In E.R. rooms, see lots of kids with type 2 diabetes.

Question raised about the meeting's objective: to look at new models, not to fix all of the issues {Waxman]. (We need to) stay away from political models and look at how to make provider systems better. We need to get rid of waste, duplication and error. Can we make healthcare costs go up with inflation rather than skyrocketing? Can we find models to identify this? Mine data, get data out to where it matters – patients, doctors. Very important project. Five years ago (it did) not work.

Another participant agreed [C. Clyburn]. Newt Gingrich had a provocative idea – we need a theory of transformation. Michael Porter started that discussion also. To throw out a few names, HIMS, AMFA, EHealth initiative; they're doing a good job. We're talking about infusing information into a system that already exists today.

Meeting facilitators asked that, knowing that we don't all agree, is there any place we can find common ground? Using the stroke study as an example, i.e., developing a

strategic team and looking at a lot of areas of a disease from a lot of perspectives. (We're hoping for) ten projects to address the problems that are identified in this study.

> From this meeting, we hope (to generate) two to three broad initiatives that people can agree upon, or at least some of us can agree upon. We hope that there will be some self-organizing and projects that will come out of this meeting.
>
> We speak of "projects" in the broadest sense of the word. How do we *think* about this (problem)? There are some fundamental differences… as Frank (Raines) said; we are trying to come up with a hypothesis that has some theoretical underpinnings.

Comment: I can see us centralizing around information.

Facilitator: Over lunch, we might think about "what would this group do?"

LUNCH

MODULE 3

Projects for Measuring Results of Health Care Providers

Facilitator: We're going to focus on results, with John Wennberg and John Gallin. We will continue our pre-lunch conversation in Module 4.

J. Gallin: Translational medicine – we should not be concerned because not everyone can do what Mass General does. The purpose of this module is thinking about solutions.

> Performance measures are critical: but we need both macro and micro.
>
> We shouldn't think about any outcome unless it is actionable, and unless we are prepared to do something with the data. In our hospital, defining the measures is the hardest thing (to do). And in the NIH, what measures should (be taken)?
>
> Patient-centered thinking is very important to us now. Death rates and survival rates. Taking a closer look at death rates from obesity. What are we doing to educate patients and (provide) access to healthcare. As Neil [Calman] said, "are we really improving access?"
>
> For the patients – we need to translate and demystify the healthcare process to them. Patient issues are wait, time spent, access to correct care provider for (their) problem. Do patients and families feel empowered to make decisions? (They have to) know how to make and participate in decisions.

The Web (Internet) is an important vehicle of communication. 50% of patients at NIH are self-referred – they used the Internet.

J. Wennberg: The framework for my understanding of health care reform is the problem of unwarranted variation in the quality and efficiency of health care—variations not explained by illness, patient preference or the dictates of evidence-based medicine; the causes and remedies for unwarranted variation depend on the category of care.

There are three categories of care:

1) Effective Care. Interventions that have been demonstrated by clinical trials or well designed cohort studies to be effective in reducing morbidity or mortality or improving the quality of life. Care in this category does not involve significant trade-offs; all with need should receive these treatments. Not enough care is being delivered for these measures. Regions who have more primary care physicians (and fewer overall numbers of physicians per capita) tend to have better records. In Medicare, regions with lots of doctors tend to have worse performance records.

2) Preference-Sensitive Care. Interventions for which there are clear tradeoffs that should depend on patient preferences, such as a lumpectomy or a mastectomy for women with early stage breast cancer. Despite this ethical imperative, epidemiologic as well as clinical trial evidence shows that physician opinion rather than patient preferences are the more important factor in determining which treatment patients receive. The remedy for unwarranted variation is the active engagement of the patient in choice of treatment—in a new model of physician-patient relationship that has been called shared decision making.

3) Supply-Sensitive Care. Unlike the other categories, clinical decision making for supply-sensitive care is not guided by medical evidence or explicit clinical theories. Here we are talking about the frequency of physician revisits, use of hospitals and ICU beds, primarily for those with chronic illness. The frequency is closely governed by the supply of resources: regions with more beds have higher hospitalization rates; those with more physicians have more visits and referrals, etc. But our studies show that more isn't necessarily better: regions with higher rates of use of these services have worse outcomes—not because they have more sick people, but because those who are sick receive too much care, i.e. the problem is overuse and waste in high use regions, not underuse and health care rationing in low rate regions (or hospitals). This is the category of care that "explains" the more than two-fold variation in per person spending between regions. If efficient regions such as Portland, Oregon or Salt Lake City, Utah were the standard for the nation, Medicare spending would be more than 30% lower on a per capita basis.

Q. (In) the end of life costs, we see a variation, why?

A. It's the supply: all ICU beds are full, many with dying patients; regions with twice as many beds have twice as many people in ICUs. This is as true for academic medical centers as it is for others. There isn't any medical science behind the variation; it's a subliminal response to supply, under the assumption that more is better. Unfortunately, it isn't better; regions with greater ICU use actually have higher mortality, I believe because they have more chances for medical errors.

Q. How do we get good outcome date at physician level, not just at the hospital level?

A. Unfortunately, it isn't available in a convincing, epidemiologically sound measurement system. Moreover, it's at the hospital level where most of the variation seems to occur.

Q. Isn't there some way we can get it (data) down to the physician level? (We) need an indicator … so people can pick a doctor.

A. You know where (at what hospital) your physician practices; if you break (data) down to the individual physician, you get lost in small numbers. Group practice level data is more promising.

Q. Does your evidence say that hospital numbers information can be a predictor of your doctor's performance?

A. The hospital doesn't admit--its physicians do, so the hospital that a physician uses is a very good predictor of his or her performance, at least for supply-sensitive care. For preference-sensitive care, make sure your doctor provides you with accurate information on treatment options—that he or she is practicing shared decision making. I hope that we soon can ask our physicians whether they are certified in shared decision making?

Q. What about going back (with data) to surgeons (level)?

A. It's cited now that we should be looking at numbers of procedures that a surgeon performs and examine his mortality rates…

(We) can do that for a bypass, but not for a tonsillectomy. Be careful for an unintended consequence of the Leapfrog group emphasis on doing a minimum number of procedures; it will push surgeons to do more, even if their patients don't necessarily want all the surgery they produce. We need to couple the volume debate with the shared decision making debate.

Q. When the provider has information, he isn't going to necessarily use it to better the patient. Regarding over the counter (OTC) antihistamines vs. prescription-only antihistamines, a great deal of medicine is now done by diagnosis and prescription.

A. The standard needs to be shifted towards informed patient choice… we have not realized (the) tipping point yet.

Q. How important is the JCA, accreditation agencies' involvement in the process?

A. It depends on the level of remedy. If we are talking about excess capacity in the acute care sector—which I view as a major policy problem, it's hard to see how there can be much of an impact from self-regulation. Some new economic incentives are needed that give hospitals a chance to adjust capacity toward the benchmarks provided by efficient hospitals and, at the same time, build the infrastructure required for managing chronic illness on a community-wide, population-based strategy.

Facilitator introduces David Eisenberg, MD, Director of the Harvard Medical School Osher Institute, to speak about results-driven approach to integrative medicine?

David Eisenberg, MD

I'm in charge of complementary and integrative medicine research at Harvard Medical School. Complementary and integrative medical therapies are frequently off the radar screen as concerns health planners and policy makers. The reality, however, is that one-third of all adults routinely use complementary therapies such as chiropractic, massage, herbs, meditation, etc., in addition to their conventional medical treatments to address their most severe and/or chronic medical problems In 1998, US adults spent approximately $32 billion out-of-pocket on complementary and alternative medical therapies. This amount was comparable to the out-of-pocket expenditures for all unreimbursed medical doctors' services.

The Institute of Medicine has recently published a report on complementary and alternative medicine in the United States. In this report, transdisciplinary medical systems of the future are discussed. In the IOM's view, comprehensive health care in the 21st Century needs to be evidence-based, patient-centered, culturally-sensitive and participatory. These views are consistent with Newt Gingrich's ideas about delivery systems which will need to be very different in the coming years. For instance:

- As we learn more about genetic testing and risks for common disease, we will be much better equipped to identify individuals at risk for common diseases such as cancer, cardiovascular disease, Alzheimer's, diabetes and obesity.
- It is conceivable that we will be able to identify these risks at birth and, in so doing, advise parents about the value for lifestyle intervention at an early age.
- We will also need to think about expanding our designs of health care structures to go beyond tertiary care hospitals and ambulatory centers. Health care delivery models of the future will also need to include health promotion

and disease prevention centers as the market place will demand these and the science will support their inclusion.

I have an idea or two about such novel health care designs. Robert Porter and Toby Cosgrove have addressed some of the issues pertaining to hospital-based (tertiary care) "pay-for-performance" options. I agree with their views and for the need to realign various components of our clinical care institution with particular needs of patient populations (i.e., combining all clinical specialties relevant to cardiovascular disease or diabetes management or cancer care, etc.). In addition, however, there may be other novel elements to be considered in the health care delivery systems of the future:

- We can imagine outpatient units which combine the best of "conventional" and "complementary/integrative" medical care for optimal treatment of musculoskeletal pain (e.g., low back pain), weight management, cancer care, cardiac rehabilitation, etc
- It may be possible to improve transdisciplinary care which will be superior to existing conventional norms. For instance, it may be that the combination of acupuncture, chiropractic, massage, exercise prescription, movement therapies and meditation when combined with conventional orthopedics, neurology and rheumatology will be superior to "conventional care" for individuals with work-related low back pain. The baby boomer generation will insist on access to these forms of care. Corporations will also want to pursue novel models which can reduce costs and improve worker productivity. It will be important to create the evidence to support or reject such models.
- We will also need to develop new centers which address issues pertaining to nutrition and lifestyle. For instance, one could imagine "teaching kitchens" to be accessed by those at risk for obesity and diabetes or those who already have a body-mass indexes in the "overweight" category. Learning nutritional facts and cooking skills may become a core component of health care management and disease prevention.

In addition, we will need movement therapy centers which go beyond standard aerobic exercise and enable the next generation to learn movement therapies such as yoga and taichi in order to treat existing diseases and prevent new ones. Once again, with increased understanding of genetic predisposition, we may be able to guide individuals to learn the appropriate lifestyle skills well in advance of disease manifestation.

We might want to begin with some demonstration projects. For instance, might it be possible to train a transdisciplinary team of clinicians consisting of both conventional and complementary care providers to improve clinical outcomes and reduce costs for those with chronic low back pain? Could similar transdisciplinary approaches be used to improve health care management for individuals requiring cardiac rehab after a myocardial infarction? Could we improve lifestyle management for individuals with obesity and/or diabetes

through the creation of transdisciplinary teams which emphasize patient participation, exercise, nutrition and stress management in addition to conventional medical and surgical care options?

We should think about demonstration projects which involve conditions that are common and costly. Examples include obesity, low back pain, asthma, and diabetes. One or two well-designed demonstration projects which showcase the value of these novel transdisciplinary approaches and which demonstrate unequivocally their superiority in terms of clinical outcomes and reductions in overall costs should be the subject of further discussion. Consumers are already using and demanding such treatments. Unfortunately, they are not being coordinated in an integrative fashion with conventional care options. This, I believe, is an appropriate challenge for this group, namely, how can novel models of "integrative care" be created, implemented and tested to demonstrate their usefulness in health care delivery systems of the future?

Facilitator: It sounds like there needs to be an alignment between consumers and providers.

Comment: (Need to) create transparency in networks.. United HealthCare is trying to increase transparency… by publishing data on physicians and healthcare systems, (providing) programs in decision support and proactively contacting (people) before conditions arise. (We have) 29 million in our database (and we're) active in outreach. We have health information available… but lots of people don't take advantage, so we are proactive (about contacting them). Also, everyone in the system can access their personal health record on (our) website. All (website) data is claims-driven, and eventually preventative issues are portable if they are allowed to be released to the family, doctor.

Comment: Public policy (is) top-down solutions. (The) non-linear nature (of the problem) has made this very difficult. (There are) side effects of (many) good intentions over the years. So, taking over the problem… patient interaction… and address it in a non-biased way. Achieve care and behavior that matches their values.

MODULE 4

Proposals: What's Next?

Facilitator: John Ullo is going to take over to help lead us, as we discuss projects for implementation, how we can start preparing for our next meeting next year.

J. Ullo: (We need to) make decisions for the way ahead; I'd like to see specific actions taken on (as our) next agenda. A lot has been spoken to already, what should be the priorities given to that by the members of this group. No one should feel like we're alone in this.

(I'd like to) preface with summaries:

- Still missing from this group – a vision, that is readily understandable to any visitor.
- We mentioned primary care tracks…a lack of universal agreement about the way to go ahead or not.
- The value of information, (that is) very valuable in the context of a vision, but (I) would like to see a link between information and (the) value it brings to the end user.
- Measurement has come up a lot. Generate lots of data, which transfers to information, which transfers to action. (But) measurement and information have to be actionable to have value.
- What does it mean for the end user to be collaborating in this? When does (he) come into the process?
- Prevention is another topic. (It is a) vast subject and has tremendous value.

We jumped all over the map in our first three modules. We need to congeal it into a story for the next stage. A "roadmap," or framework, for the way ahead. It has value, because we come to grips about what we know and what we need to do ahead. It has the global architecture of vision, at the 40,000 (foot) level. A question – how do we take the Cleveland Clinic information to the full population? (Or,) why aren't good ideas propagating faster than we expect?

Let's keep what is good and throw away what isn't. (There are) lots of chess pieces; we need to get them on the table and have a strategy for what's ahead, a cogent story ahead. Important:

<u>The point of view of the end user.</u> We do this – think of the end user – in industry all the time. We don't have any choice but to take it into account.

<u>Bridging ideas to vision</u>

- There are two approaches (to bring change) revolutionary versus evolutionary OR lots of evolution leads to revolution.
- We need some theory… don't know where to begin, but maybe some of you do.
- We have to recognize that the future is going to change; factor of seven times in technology.
- We need to get into technology sooner…"too expensive" is not (an) acceptable (answer).

Comment: Suggestion that changes will be in genetics. During the last 100 years, infectious diseases (were the frontier); (now) even with computers, there were no more significant changes until genome discovery. Now it is changing (frontier) every week. All of the changes Newt pointed to are going to happen.

Participants put forward suggestion for projects and/or for the group.

- Information: Outcome information as close to provider level as possible.
- Communication: Content as close as possible

- Alternative approaches to chronic disease care: Can we come up with a team approach to it? The faster we generate proposals, the bigger impact (we can) have on healthcare.
- How do we increase the information technology content of medical processes? 3K spent annually in healthcare (on technology) compared with 7K in industry in general, 15K in Fannie Mae (his old company). How do we make technology upgrade part of the evolutionary process, injecting productivity more into the process?
- (There is) a tremendous amount of information in the system that does not go around. This group (should) define a standard of information that (a) healthcare plan should have and provide to members, doctors, nurses and care managers, so that everyone is looking at the same information.
- Limit to one to three demonstration projects that are common problems, costly, ineffectually treated, and affect the private sector. (For instance), stroke has been less important than heart disease. Look at) prevention all the way to tertiary care or hospice.
    - End of life, body breakdown care
    - On the way to heart disease process
    - Child diagnosed with diabetes gene

- There is enough information in the system to get started is true.
- If we do demonstration projects, it is like turning the group into a funding foundation. Is that really what we want to do? Or should we be like a think tank to advise Congress? We need to decide which road to follow.
- Is it possible to integrate demonstration projects and policy? We need proof of concept before people buy in.
- (There is) no way to have a national database unless (we're) OK'd against genetic discrimination on the basis of genetic testing. (It) needs federal legislation first before we can do (that).
- Whatever we pick up needs to resonate with everyone, e.g., eldercare… (that) resonates with everyone.
- (We) need to be very careful not to duplicate efforts – of what's going on already in the community. There are barriers… one huge barrier is economic… state law issues.
- We need to make a project that sees what's out there right now.
- Whatever we select – we need something that is actionable. (We should) not fall into the policy trap of trying to advise Congress and the Federal Government. (This is) being done at state level, don't see leadership at federal level.
- (There are) good ideas today about involving patients in decision making. People's decisions (are) based on cost. (How about) a project that looks at consumer input in terms of decision making, versus outcomes and data on the other hand? What we do on it is less important, if we choose something with that model and it shows improved outcomes, it is good.

- Don't bite off something that's so big when you start as a group. As you grow, you learn to work together and can bite off more.
- Technology issues… more will come out of it (if we) take (a) major initiative and break it down into projects.
- (The) entire group (is) run by doctors and health care providers. (The) culture is set up to be against rapid change. Twenty years of training are against us; new ideas in medicine take about eleven years (to incorporate into culture). (It's) not turning around quickly, but (we) need to understand the culture in which everyone is trained.
- Asthma in children – add (that) to the list.
- Asthma topic is seconded. (We) need to involve the patient as a client… causing active change. A project like asthma would be ideal.
- Conditions that span the lifespan, such as obesity, asthma, diabetes. (The) private sector won't see the incentive unless (the project) spans a lifetime. (The) approach needs to be refined for different populations.
- (It) excites me to be in this setting with so many people of different backgrounds, and starting a "lab" at the Cleveland Clinic or one of my health centers. Everyone has to be excited to do this… plants, employers, consumers… what works for everyone?
- Across the board and in economically underserved areas which will impact the government across the board.
- (I) echo that comment… the largest employers' requests are regarding weight management all the way through bariatic surgery; healthy back (issues); pain requests; productivity in the workplace.
- I'm feeling a little skeptical about what happened during the last six hours. Do we really want to do something as a group but we're not going to gel into action? Some people will gel, some won't … where can I make a contribution? We've got to get this thing into bite-sized pieces.
- Also recognizing that we have a limited ability to change people's behaviors unless (we) give them control of information… patient involvement was a primary issue here.
- How does this group do something about it? Pick one of four major diseases, then set about solving that.

L. Sullivan suggested that, since the meeting was ending, conference calls over the next few weeks could help solidify participation.

CONFERENCE CLOSED

Attachment 1: Transcript of Opening Address by Louis W. Sullivan, MD

Louis W. Sullivan, MD, former Secretary of HHS, and President Emeritus of Morehouse School of Medicine.

Having been here at the April 12 meeting, I am very excited to be here today. (This is) a challenge we must all rise to. The U.S. System has a lot of strengths:

- Leading system in the world in Biomedical Research (reaping the benefits from the contributions of many others now)
- Strong Health Professions education (was not always the case, 1910 Flexner Report was a cataclysmic critique of the system that changed the face of medical education.
- Strong technology in our system.

The problem? It costs too much:

- 5.6% U.S. GNP in 1960
- 11% of GNP when he became secretary in 1989
- 16% of GNP currently and rising

We need ways to continue reaping the benefits and correcting the things that are causing problems. We need to increase efficiency and find ways to deliver care at less cost.

At the April 12 meeting, we talked about successes: we need to learn more about them and build on them today.

- Life expectancy almost double what it was a century ago.
- Childhood communicable diseases greatly reduced– eliminated smallpox, close to eliminating polio.

Prevention: we need to continue biomedical research but we need to change the health behavior of our citizens. How do we improve the health behavior of our citizens?

Attachment 2: Transcript of Review of Major Themes from Last Meeting by Michael Porter and Toby Cosgrove, MD

Review of Major Themes from the Last Meeting:
Information, Results, Primary Care and Prevention

- **Michael Porter,** University Professor, Harvard University; Director, Institute for Strategy and Competitiveness, Harvard Business School
- **Toby Cosgrove, MD,** CEO of Cleveland Clinic

M. Porter

I'll present an overview of where we got to last time (April 12). If you were here, it will distill the key messages to take away for you; if you were not here, it will catch you up with the perspectives that were shared in April.

Cleveland Clinic's story – publishes results, value-down healthcare we've been talking about.

Hope for this session: that we'll have two to five concrete initiatives that would be metaphors for the larger change that needs to happen.

Take stroke (project started after Apr. 12 session): treat as discrete medical condition – it can be a metaphor for other conditions and like problems in the system.

The lowest-cost healthcare is to not get ill. Can we find a project there to address the initiative to raise the value in the system?

Measuring results is the fundamental driver of change in the system.

We need to find a specific initiative and approach to rapidly expanding problems. The broad perspective – take a series of broad initiative groups that we are participating in, lead to some specific initiatives. I did make a handout...

I'd like to share some perspective about how we think about the system. Insurance: we've got to address the issue of coverage – but the core of the problem is how it's delivered. We must increase the value of the care delivered. How do we increase the value of the care delivered?

The system hasn't been organized so that competition is on value. Currently is based on cost-shifting competition (zero-sum); we must change it to compete on value.

1) We must focus on value, not just cost. Importing drugs from Canada doesn't do it. Limiting the number of doctors isn't about value. It doesn't require us to pay more. Is care organized around value? Questions follow…
2) We have to open up competition in the system on results. There is very little now. We need to shift the model from controlling supply to competing on results. We've got to get patients to providers who have the best value. Currently we've got a "lift-all-boats" mentality for everyone in the system. But trying to bring up all providers is less effective. Pay-for-performance is NOT pay-for-value. That is off-based, more of a "managed care mentality."
3) We've got to get the competition away from medical partners/institutions to medical conditions. That's where competition is created. In the current system, if you're in a partner's health system, that's where you stay. Competition needs to be on the whole cycle of care, rather than discrete intervention (i.e. a surgeon's role). The cycle of care always starts with prevention and ends with disease monitoring. In the current model, everyone is thinking about discrete intervention.
4) Luckily, this is an industry were we shouldn't have to pay more for good quality: we have it in the system. But we have to get the diagnosis right the first time, and get the patient to the right drug.
5) Value delivery is very strongly dependent on the provider's experience, expertise and patients.
    a. Having appropriate facilities
    b. Having a dedicated, full-time team available
    c. Not having fragmented services… it doesn't make economic sense.
    d. Think of focus instead of breadth.
    e. Healthcare provided locally still, but not managed locally. (Not the cottage industry mentality it is currently).
6) Competition should be regional and national, not just local.
    a. Now we have a geographically fractured system… managed on a one-by-one basis. There is not a lot of difference.
    b. Information becomes critical. Some (information) needs to be universally available.
    c. Primarily results need to be available.
    d. We've proven that we can measure outcomes and risk-adjust.
    e. Other things need to be measured.
7) Needs to be a system that rewards innovation as well.
    a. Currently providers can lose if they innovate because currently we pay for services, not health.

If we accept this perspective, there are a series of implications:
A) We have to be sure that providers have the right goal – value.
B) Providers have to organize around the right values, restructure how:

a. Co-locate specialties
b. Providers need to take the lead in measuring results.
c. Getting rid of multiple bills, changing the billing and pricing. (Proven that there can be a single bill for transplants to cover everything.)

And also there are some interesting implications to change the geographical nature of the system.

In short, the main idea: We've got to shift the basic nature of competition to focus on:

Conditions
Cycle of care
Results

This requires:
Information and reorganization

T. Cosgrove I want to talk from the trenches rather than 30,000 feet (as Michael has been doing), about what the Cleveland Clinic has done over time as a process of evolution.

Several steps:

A) Organizing in a different way other than the Department of Surgery, Department of Medicine; now we are in "Organ Systems" and "Disease Systems."

B) We've put these (new organizations) in one physical space to cross-fertilize among specialities and develop expertise and help research.

C) Since we can't as oneh physical campus take care of all of our specialities, we've removed obstetrics and psychology to local hospitals. We've changed the way we physically and intellectually provide care to our patients.We have one central hospital, 10 (?) hospitals in Cleveland, and several community hospitals. We've centralized acute diseases in that area.

We have to measure more than cost to determine value. 10,000 patients were measured over time and done (with?) sophisticated results:

Looking at the trends and identifying problems
Allowing us to understand better.
(i.e. able to see stroke as an issue and find results)
This only comes from understanding the problems, recording them, and analyzing the results.

Now we give a single bill, and make that more patient-friendly; we are able to know what (will be) paid. Have done this for a while with overseas

patients (contract for service), and have provisos for unexpected outcomes.

We've provided cardiac surgery services in other hospitals nearby in Cleveland, then 3 years ago (branched out to) Rochester, NY. We started to provide areas of expertise: teaching, training technicians, subject them to Cleveland Clinic's scrutiny in everything. We've investigated doing that with other institutions.

The glue that holds this all together – a willingness to be transparent with our outcomes. First, to share with cardiologists within the hospital, then others ask for outcomes.

One year ago, got a mandate to extend to other departments; picking two to three outcomes (not processes) and reporting them. That is hard to determine for some departments (i.e., dermatology).

This turns the art of medicine into a science by putting numbers to them. Statistically developing an algorithm.... (Looked at) 10,000 patients going back 10 years (to develop). But (realized) that if they did develop an algorithm and wrote it up, it would be written in stone. So thought it would be best to continue rather than codify and dogmatize the results at a certain point.

(We're) increasingly dependent on our electronic medical record.

Questions from Participants

1) What are the challenges raised by most doctors... NY cardiologists who published results, resulting in "cherry picking" allegations?

M. Porter: There is no doubt that in the value-based system there will be efforts to "gain the system." We would expect to see that happen. (To minimize that): a) Measure results in a sophisticated way and b) Change over time. Then it becomes harder to "gain the system." People will expose holes in the system, but we can't let that stop us from going ahead.

T. Cosgrove: Early on there was "cherry picking." Over time, the risk adjusts - becomes more sophisticated.

2) Focusing on the medical condition, is that really the best? Focusing on the patient, not the condition? (e.g., diabetic patient)

T. Cosgrove: (We) do focus on the patient now... they go to three places instead of six with (all the) multisystematic problems.

M. Porter: In a good diabetic practice, you will be able to know and anticipate issues. One medical condition becomes the major issue, i.e., "the quarterback."

3) It sounds like you're both proposing creative destruction in healthcare; a number of hospitals will have to close.

M. Porter: Quite a few hospitals are spread too thin, have to decide where to cut back on services. (They will) operate less as stand-alone entities, will partner with other institutions. Part of the care cycle will involve other, more expert system, reallocating of services across institutions because healthcare is growing in the U.S. The organizational model needs to change. Some hospitals will shrink and go out of business but most of them will just reorganize.

T. Cosgrove: It needs to happen, politically it's not good… but it has to happen.

Comment: The healthcare system has to change, but our focus is how will that affect the consumer? What happens when the focus for competition is on the consumer? When the provided information is absorbed by consumers over the Internet, through the community? Need to arm consumers to participate in this search. They need help. They need someone to convert all of this information into a "stars" rating system.

Looking at the issue of coverage; care, how to run hospitals, incentives. (There is a) problem in this industry, unlike others it doesn't routinize and push out of the higher technology into the simple.

Convenient care (we need) places like Wal-Mart, where 40 conditions (can be dealt with) by nurse practitioners.

Health care coverage – more dollars in the care of consumers; they pay, they choose. (We need) new ways to think about chronic care, not paying for "a la carte." (We need) insurance pushed back into the catastrophic, not just day-to-day care.

Comment: Morals of reform (are) required; laws around coverage, and minimum treatment laws in state.

Comment: Agreement with focusing on a disease model. (A) barrier I have run into as I drive co-location, need integration to drive outcome. The departmental structure works against integration. (It) works against how people have achieved their power, particularly in an academic environment.

T. Cosgrove: Money flows from the institution, not from the department. Leaders – new heads of these "disciplines." New educational models are needed.

Comment: Cleveland Clinic is terrific in improving competency of providers. Problems have been in business for too long. Dealing with enormously non-linear (don't understand all the inputs and how to code them) and free-enterprise system (aging

system, illness system, diet and exercise-driven system). A problem I don't hear – information. The system has no information. From hospital to sub-intensive care system. (Need to) give a patient access to information and allow them to move it around.

Comment: President Bush's initiative … electronic medical record.

Comment: Every health plan should comply to transparency and certain information standards in a free-enterprise

> M. Porter: Information architecture needs to change, but it's not everything. Information is generated by providers. First layer of information collection is at the provider – it is a problem, we haven't been able to do that. Cleveland Clinic sliced and diced (the information) so the patient can see it (except for a sensitive diagnosis like cancer, until the patient is told). Provider first collects information and make it available to everyone who needs it; second, how do you aggregate it to make it available across providers? That's a hard problem. IT standards, systems is an issue.

Comment: The only person who benefits currently from prevention is the consumer. Believe that prevention programs need to be paid for by them. Prevention and ordinary primary care put money in the consumers' hands.

Comment: Patients really need to own the system, i.e. Hurricane Katrina, where most medical records were lost.

Question: Relating issues of care to areas of emphasis will this affect the poor getting these services?

Question: On hospital system is this a fair analogy – System of airlines… hubs, airports, down to small turboprop airports?

> T. Cosgrove: Yes, that's an excellent way of looking at it. Tertiary hospitals, etc.

> M. Porter: Got to get away from the model where have full-service institutions next door. Some ways of aggregating value and experience that involve patient traveling to an institution, also, in other cases, one institution supervises another. Need new geographic partnership structures.

Appendix C: Roadmap Working Group Meetings and Draft Roadmap Outline

Roadmap Working Group Meetings

- 1/10/06 – Conf., call w/Mike Love, Jeannie Bochette, Tenley Albright, Ken Kaplan
- 1/17/06 – Dan Schodek, Steve Spear Campbell Murray, Jon Ullo, Tenley Albright, Ken Kaplan, Deirdre Hering
- 1/20/06 – Conf. call with Jeannie Bochette
- 1/30/06 – Conf. call w/Jeannine Rivet, Ken Kaplan
- 2/16/06 – Jon Ullo, Campbell Murray, Steven Spear, Deirdre Hering, Ken Kaplan
- 3/6/06 – Tenley Albright, Jeannie Bochette, David Eisenberg, Mark Greiner, Ken Kaplan, Campbell Murray, Marco Steinberg, Jon Ullo
- 4/18/06 – Ken Kaplan, Deirdre Hering, Campbell Murray
- 4/28/06 – Conference Call with Ken Kaplan, Tenley Albright, Deirdre Hering, and Jeannie Bochette
- 8/2/06 – Ken Kaplan, Mark Greiner, Jeannie Bochette, Dan Schodek, Campbell Murray, John Ullo, Deirdre Hering

Draft Outline for Roadmap to Improved Health Care Delivery System

A "roadmap" for the way ahead will help us come to grips with what we know now and what we need to do. It's the global architecture at the 40,000-foot level and the framework, with phases and milestones for moving forward. It enables us to constantly evaluate, learn, and alter the course based on new knowledge.

- Define a **Vision of an ideal health care delivery system** in terms of its characteristics, e.g., patient-centered, transparent, accessible to all, high-quality, cost effective
- Define plausible scenarios (major pathways) that could lead to this vision
- Elucidate the challenges faced by the major stakeholder groups: employers, government, insurers, providers, and consumers
- State acceptable options to address these challenges, recognizing dependencies among the stakeholders which will require their collaboration
- Common elements broken down into several themes

We suggest that the roadmap:

1. **Address several themes** with a common outline:
   - Introduction: define the theme and how it underpins or integrates with others
   - Current state and contribution of theme to vision
   - Theme challenges
   - Path forward and time
2. **Define potential projects** that could be pathfinders for defining and implementing new models on pilot scales.

Theme 1: Information: Transparency, Access, Decision Making

- Introduction: define the theme and how it underpins or integrates with others
- Current state and contribution of theme to vision
- Challenges: A limited list of challenges follows:
  - Providers: distinctiveness (differentiation) of services, integrated care for major diseases, quality indicators.
  - Employers, insurers, consumers: many choices of coverage with no restrictions (better buyers and better sellers)
  - Providers, insurers: transparent pricing (replace today's quagmire)
  - Providers, insurers: simpler billing
  - Providers, government: accessible information especially on outcomes
  - Insurers: nondiscriminatory insurance writing; risk-adjusted pricing to make sure that the sick are fairly included
  - All: fewer lawsuits
  - Government, insurers: national list of minimum coverage
  - Insurers: payment strategies to create value not just minimize cost
  - Consumers: economic control, consumption of information, feedback on system performance
- Path forward and time

Theme 2: Health Promotion and Disease Prevention

- Introduction: define the theme and how it underpins or integrates with others; define characteristics and benchmarks of an effective program
- Current state of Wellness/Preventive Care Programs against benchmarks
- Challenges:
- Path forward and time

Theme 3: Measuring Performance of Health Care Providers

- Introduction: What is quality? How does this theme underpin or integrate with others
- Current state and contribution of theme to vision
- Challenges
    - Barriers to measurement
    - Metrics of health care success/quality and costs – must be easily comprehended by consumers
    - Easy access to information
    - Legal implications – should not become a catalyst of lawsuits
- Path forward and time

Theme 4: New Technology Pathways

Not a technology roadmap per se, but a roadmap for creating timely access to and benefit from new technology

- Introduction
- Current state and contribution of theme to vision
- Challenges
- Path forward and time

Time Scales

Near: 1 – 3 years

- Quick return on current effective ideas
- Collaborative interactions of process owners
- What research is needed for the future

Mid: 4 – 8 years

- Monitoring of conditions and improvements
- Gauge metrics of success
- Early research ideas – pilot studies
- Update research agenda

Long: > 9 years

- Metrics of success
- Research agenda: pipeline is primed
- Qualitative leap in health care understanding and methods to keep advancing

Potential Pathfinder Projects *

- **Childhood Obesity (2) P. Johnson, BWH (PI), Welters (AmeriChoice),**
- **Back Pain (2) Eisenberg, Zenith Insurance**
- **Measuring Quality of Care (3) Weinberg**
- **Better integrating IT into delivery (1)**
- **Continuing Stroke projects (2) M. Steinberg, HDS**
- Measuring the Value of Wellness (2)
- Alternative approaches to chronic disease care (2) Raines, Eisenberg
- Model clinics – current best practices (1)
- Wellness centers of the future (2)
- Health plan evolution – guides to consumers adhering to certain standards (1)
- Federal/state initiatives – do they match a sensible roadmap? (1)
- Underserved populations (1)
- Access to and use of information – link to IT (2)
- Diabetes (2)
- Data mining – links to EMRs (3)
- Metric definitions and standardization (3)
- Link to disease management models (use cases: the patient experience) (3)
- IT – many ideas, some already being introduced (4)
    - Electronic medical records
    - Computer-assisted clinical decision support
    - Computerized order-entry for providers (tests, prescriptions)
    - Secure exchange of data (capture standards, exchange standards, non-standard data)
    - Smart cards
- Predictive medicine (genomics, proteomics) (4)
- Nanotechnology (4)
- Cancer management (4)
- Vascular management
- Scaling to the entire population (4)

* Number in parentheses indicates primary roadmap theme. Most projects would likely span more than one theme.

Appendix D: Obesity Working Group Meetings and Observations

Obesity Working Group Meetings

January 2006	NYC	Tenley Albrigh Ken Kaplan Tony Welters (AmeriChoice) regarding his vision for an obesity project
April 4, 2006	Collaborative Office	Tony Welters (Americhoice) Thelma Duggin (Americhoice) Dr. Tenley Albright Ken Kaplan Deirdre Hering Marco Steinberg Campbell Murray Jim Tallon (New York Hosp Fund)
April 7, 2006	Dr. Paula Johnson's office	Dr. Paula Johnson Dr. Tenley Albright Ken Kaplan to discuss Johnson's co-leadership of initiative
April 24, 2006	Conf Call	Dr. Paula Johnson Ken Kaplan Deirdre Hering
April 27, 2006	potential private investor' office	Dr. Tenley Albright Ken Kaplan
May 1, 2006	Conf call	Tony Welters Dr. Tenley Albright
May 11, 2006	Conf call	Dr. Tenley Albright Dr. Paula Johnson Leslie Robinson (Americhoice) Terry Kungel Ken Kaplan Campbell Murray

May 16, 2006	Collaborative Office	Dr. Tenley Albright Ken Kaplan Deirdre Hering
May 17, 2006	Collaborative Office	Dr. Tenley Albright Terry Kungel Ken Kaplan
May 19, 2006	Atlanta	Dr. Louis Sullivan Dr. Tenley Albright
May 26, 2006	Brigham & Women's Hosp.	Dr. Paula Johnson Dr. Tenley Albright Ken Kaplan Terry Kungel Leslie Robinson Campbell Murray Marco Steinberg
June 13, 2006	Collaborative Office	Dr. Tenley Albright Ken Kaplan Terry Kungel Deirdre Hering
June 15, 2006	Collaborative Office	Dr. Tenley Albright Dr. Maria Alexander-Bridges, HMS (Novonordisk) Oxford Health Alliance**
June 15, 2006	New York City	Ken Kaplan attended a conference on obesity
June/July 2006	Conf calls	Ken Kaplan Prof. John Billings, NYU
June 23, 2006	Collaborative Office	Dr. Tenley Albright Ken Kaplan Terry Kungel
June 26, 2006	Collaborative Office	Dr. Harvey Lodish, Whitehead Institute, MIT Mr. Ken Kaplan Dr. Tenley Albright
June 26, 2006	Collaborative Office	Mr. Tony Welters Dr. Tenley Albright

		Mr. Ken Kaplan
June 28, 2006	Conf call	Dr. Tenley Albrigth Ken Kaplan Leslie Robinson (Americhoice)
June 30, 2006	Conf call	Dr. Tenley Albright Ken Kaplan Dr. Paula Johnson Leslie Robinson (Americhoice) Lourdes Hernandez-Cordero (Columbia University)
July 12, 2006	Collaborative Office	Dr. Tenley Albright Ken Kaplan Deirdre Hering Dr. Paula Johnson Shelley Starks Jeannie Bochette (via telephone) Ms. Leslie Robinson (Americhoice) Lourdes Hernandez-Cordero (Columbia University) Dr. Chris Hug, Whitehead Institute, MIT
July 31, 2006	Conf call	Dr. Harvey Lodish Mr. Ken Kaplan
August 3, 2006	NYC	Dr. Paula Johnson Ms. Leslie Robinson Mr. Ken Kaplan Dr. Bernyce Peplowski (Zenith; via telephone) Dr. Christopher Hug Ms. Jeannie Bochette Ms. Barbara Charbonnet (Columbia University) Mr. James Tallon Dr. Lourdes Hernandez-Cordero Dr. Hal Strelnick (Bronx)
August 16, 2006	Conf. call	Ms. Leslie Robinson Mr. Ken Kaplan
August 21, 2006	Conf. call	Dr. Hal Strelnick (Bronx) Ken Kaplan

September 1, 2006	email	Dr. Daniel Korin (NY) Dr. Judith Flores (NY) Dr. Steven Shelov (NY)
September 8, 2006	Conf call	Dr. Kate Shoemaker (Harlem Childrens Zone) Mr. Ken Kaplan
September 15, 2006	Conf call	Ms. Leslie Robinson Dr. Judith Flores Ken Kaplan
September 15, 2006	Collaborative Office	Martha Blaxall (Brookings Institute) Michelle Bertrand (Brookings Institute) Dr. Tenley Albright Ken Kaplan
September 15, 2006	Conf. call	Dr. Louis Sullivan
September 20, 2006	Conf. call	Dr. Paula Johnson Dr. Tenley Albright Ken Kaplan
September 27, 2006	Conf. call	Dr. Kate Shoemaker Mr. Ken Kaplan
September 27, 2006	Dr. Johnson's Office	Dr. Paula Johnson Dr. Tenley Albright Mr. Ken Kaplan
September 29, 2006	Conf. call	Dr. Paula Johnson Dr. Tenley Albright Mr. Ken Kaplan

Observations of the Working Group on Obesity

The United States is facing an epidemic of obesity. While being overweight has many disadvantages and associated costs, of primary concern are the subsequent conditions that result, for example, Type II diabetes and cardiovascular and pulmonary diseases (CVD/PD). The epidemic of obesity that is in evidence today will become an epidemic of diabetes and an epidemic of CVD/PD in future years.

Many studies of obesity have made significant contributions to understanding the science and behavior of this condition. Yet there has not been an effective, integrated approach to addressing this problem on a national basis. We are in the infancy of understanding the "whole picture" of obesity, which must be studied at many distinct but interconnected levels: 1) Societal, 2) Care Delivery, and 3) Science.

The informal Working Group on Obesity that emerged from the November 18, 2005 New Models meeting has been actively exploring the development of an initiative on childhood obesity and its relationship to the incidence of adult diabetes in children. The focus is on children because there is less quantitative data for this group and because this group represents the greatest opportunity for improvement. Proposals from group members have included: a 10-year study of childhood obesity/diabetes that leverages existing data to identify interventions and test them at three sites in the United States with high incidence of obesity/diabetes, particularly among minorities; a short-term pilot study in New York City to test evidence-based findings leading to a national rollout of those that can be applied in the near term; and an initial feasibility study/project definition to home in on the best areas to study.

After a number of meetings in New York City, Washington, and Boston, the group has arrived at the following observations and recommendations:

- The scope of defining the childhood obesity/diabetes issue must be broadened before it can be narrowed down into discrete projects.
- The current methodology that is being developed by Prof. Marco Steinberg and Prof. Elizabeth Teisberg for the Stroke Pathways project could and should be applied to a similar broad assessment of childhood obesity /diabetes, with the emphasis on integration across a broad spectrum of disciplinary expertise.
- Dr. Paula Johnson of Brigham and Women's Hospital, Prof. Michael Porter of Harvard University, and Prof. Robert Langer of MIT have seen the latest version of the Stroke Pathways presentation and all are enthusiastic about its emerging methodology as a means to systematically analyze and define complex problems in healthcare, like those in the arena of childhood obesity/diabetes, to identify the best areas of intervention.
- The recent Institute of Medicine (IOM) report on childhood obesity* confirms and documents much of the relevant information available to date and can be a useful knowledge platform.
- However, the IOM report also validates the lack of productive approaches for tackling this complex issue, stating "There is a substantial underinvestment of resources to adequately address the scope of the obesity crisis. Interventions generally remain fragmented and small-scale."

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* Committee on Progress in Preventing Childhood Obesity, *Progress in Preventing Childhood Obesity: How Do We Measure Up?,* Institute of Medicine, Washington, DC, September 2006.

- To further define and launch a childhood obesity initiative, the Collaborative Initiatives at MIT proposes a Leadership Summit at MIT no later than this coming spring. Dr. Louis Sullivan supports this idea and will again play a significant role in this summit.
- Formalizing the Working Group on Obesity and promptly implementing a systematic assessment of the obesity issue will produce a strategy for action and a number of projects that will effect positive change.

Appendix E: Back Pain Working Group Meetings and Progress to Date

Low Back Pain Meetings

January 11, 2006	Conf call	Mr. Stanley Zax (Zenith) Dr. Tenley Albright Mr. Ken Kaplan
January 30, 2006	Conf call	Ms. Jeannine Rivet (United Health) Dr. Mark Friedberg Dr. Tenley Albright Mr. Ken Kaplan
February 17, 2006	Conf call	Dr. David Eisenberg Mr. David Elton Ms. Jeannine Rivet Mr. Ken Kaplan Ms. Deirdre Hering
March 3, 2006	Conf call	Dr. David Eisenberg Mr. Ken Kaplan
March 10, 2006	Conf call	Dr. David Eisenberg Mr. Ken Kaplan
March 15, 2006	Conf call	Dr. Mark Friedberg Mr. Ken Kaplan
March 23, 2006	Conf call	Dr. David Eisenberg Mr. Ken Kaplan Prof. Marco Steinberg
April 6, 2006	Conf call	Dr. Tenley Albright Ms. Deirdre Hering Dr. David Eisenberg Dr. Mark Friedberg Dr. Campbell Murray Mr. Stanley Zax
April 26, 2006	Dr. Eisenberg's office	Dr. David Eisenberg Dr. Tenley Albright Mr. Ken Kaplan
May 8, 2006	Collaborative and Eisenberg's office	Mr. Stanley Zax (Zenith) Dr. David Eisenberg Dr. Mark Friedberg Dr. Campbell Murray Dr. Tenley Albright Mr. Ken Kaplan Ms. Deirdre Hering

May 16, 2006	Eisenberg's office	Dr. David Eisenberg Prof. Marco Steinberg Mr. Ken Kaplan
June 16, 2006	Collaborative Initiatives Office	Dr. Tenley Albright Mr. Ken Kaplan Ms. Sally Andrews Dr. David Eisenberg Mr. Terry Kungel Dr. Campbell Murray Dr. Charlene Ossler (Zenith) Dr. Bernyce Peplowski (Zenith) Prof. Marco Steinberg
June 22, 2006	Conf call	Dr. Bernyce Peplowski Mr. Ken Kaplan
July 24, 2006	Conf call	Mr. Stanley Zax Dr. Tenley Albright Mr. Ken Kaplan
July 24, 2006	Conf call	Mr. Ken Kaplan Dr. Bernyce Peplowski
August 14, 2006	Conf call	Mr. Ted Kelly (Liberty Mutual) Dr. Tenley Albright
August 21, 2006	Conf call	Mr. Ted Kelly Mr. Stanley Zax Dr. Tenley Albright Mr. Ken Kaplan Dr. Bernyce Peplowski Dr. David Deitz (Liberty Mutual)
September 8, 2006	Conf call	Dr. Bernyce Peplowski Mr. Ken Kaplan

Progress to Date on Back Pain Initiatives

Low back pain certainly meets the criteria for demonstration projects suggested at the November 18 meeting – "common problems that are costly, ineffectually treated, and affect the private sector." Total health care costs for low back pain have been estimated at $100 billion per year and it is one of the most common causes of missed work.

At the November 18 meeting, Dr. David Eisenberg, Director of the Harvard Medical School's Osher Institute, proposed exploring the issue of low back pain with insurance and industry partners. Early discussions with United Health Group involved brainstorming and data sharing with their extensive research group. Discussions with Zenith Insurance indicated their interest in addressing quality of care and its influence on cost and in finding the appropriate practitioners for back pain patients. Dr. Mark Friedberg, a physician and researcher from the Harvard School of Public Health, engaged in the study of quality of care, was included in several of these meetings.

Dr. Eisenberg and staff at Zenith proposed a two-site clinical research demonstration project involving integrative care (combined alternative and conventional care) intervention to patients with persistent low back pain in terms of cost and quality of care. Dr. Eisenberg's intention is to build on a pilot study performed at Brigham and Women's Hospital comparing the relative effectiveness on sub-acute and persistent low back pain of integrative care to care provided solely by conventional practitioners; this study trained a multi-disciplinary team of clinicians to treat adults with musculoskeletal pain.

After a number of discussions and meetings with both clinical and industry representatives during the reporting period for this contract, the following observations can be made:

- Back pain is a highly complex condition with an array of influences, from clinical to socio-economic, that are not fully understood. Broadening the scope to a more strategic level before defining specific project-level pilots may be beneficial.
- A number of insurance companies have expressed interest in pilot projects to explore issues such as how to define and measure the quality of clinical care, and impact of various types of intervention can play on both economic and clinical outcomes.
- However, because the lack of industry-wide standards and, in many cases, the lack of accessible quality data, each of these industry groups are requiring help in determining the methodology from which a study could be promulgated.
- Again, the Steinberg-Teisberg Stroke Pathways research framework becomes an interesting resource that could perhaps be used to look at back pain in the context of the system wide inconsistencies that are impeding productive treatment mechanisms.
- Moving beyond back pain alone, one interesting focal point suggested by an informal advisor in Boston is to investigate the array of mechanisms for measuring pain in general and that a project could be launched by the

Collaborative Initiatives at MIT in order to understand, in both current research and practice, what new innovations in neuroscience could be applied to better conceptualize the way pain is measured and documented.

- Discussions with industry and government groups are continuing to further articulate the next steps in this arena, but it is clear that a better definition of the problem should be developed before meaningful innovation can take place.
- That definition could be addressed in a larger meeting with some of the original members of the New Models group in association with select leaders interested in resolving the complexities of "pain" and its relationship to clinical outcomes and economic productivity.